



# GESNERIADS

The gesneriad family consists of mostly tropical plants, such as African violet and gloxinia, and is made up of 120 genera with about 1500 species from Africa, Asia, and Central and South America. About 300 species are cultivated, exhibiting an incredible diversity of growth habit and flower form.

## Light

Gesneriads are grown primarily for their flowers. Almost all of the cultivated gesneriads produce their beautiful flowers at relatively low levels of light which makes them ideal indoor flowering plants. Many have long blooming periods, and some hybrids will bloom year-round if light levels are adequate.

## Temperature

Indoor temperatures closely resemble those found in gesneriads' native environments, averaging between 60 and 80 degrees Fahrenheit during the day and 60 to 70 degrees Fahrenheit at night. Temperatures must never be allowed to drop below 55 degrees Fahrenheit or the plants will lose vigor and permanent damage may result.

## Moisture & Humidity

Gesneriads generally require moderately high humidity. The humidity around plants can be raised in several ways. The simplest is by humidifying the room in which they are kept. The humidity level (around 50%) at which most gesneriads do best is also considered the best level for human health. If humidifying an entire room is impossible, the area immediately surrounding plants may be humidified by setting plants on top of trays filled with wet gravel. The pots should not be sitting in water, but should be kept above the water level by the gravel or the soil will remain constantly saturated and the roots may rot.

Gesneriads are also well-suited to fluorescent light gardens. Their low light requirement allows them to bloom readily under standard cool-white/warm-white fluorescent fixtures. The correct distance from the lights for a particular species can be determined by experimentation. A plant is receiving too much light if its leaves start yellowing, bunching in the center, or hugging the sides of the pot. Too little light causes leaves to be darker, stems to be longer and weaker, and flowers to be sparse or absent. Please refer to *Growing Plants Under Artificial Light* for more information on this subject.

Because they need humid conditions, gesneriads are excellent terrarium plants. Small, flat growing plants are well-suited for

this purpose. Dollbaby Gloxinia (*Sinningia* 'Dollbaby'), a miniature hybrid gesneriad, is especially useful in a terrarium. Other dwarf gesneriads that work well include *Sinningia pusilla*, *S. concinna*, *S.* 'White Sprite', *Gesneria cuneifolia* and its many variants, and miniature hybrid African violet (*Saintpaulia*). Species of *Sinningia*, rosette forms of *Streptocarpus*, *Boea*, and juvenile stages of trailing plants all can be used.

Gesneriads will flourish in a home greenhouse. Shading is essential from March to September since gesneriads will not tolerate the full intensity of summer sun. Temperatures should be monitored carefully in the winter to avoid temperatures below 55 degrees Fahrenheit, which may damage the plants.

Windowsill gardeners, too, will find many gesneriads adapted to the environments they can provide. Trays of moist gravel will help add the humidity that some species need. Sills can be extended with wooden or glass shelves to keep plants away from the cold window glass in winter. South windows should be avoided during the summer months unless they are shaded, though gesneriads will tolerate and sometimes require southern exposure in winter. Plants must be turned frequently so that they will not become uneven as they grow towards the light. Even some of the best everblooming types may be difficult to keep in bloom in the winter when light levels are low and the days are short.

As with all other houseplants, the frequency of watering gesneriads depends on the type of pot and growing media, and on how actively the plant is growing. The best rule is to water well with room-temperature water whenever the top of the soil feels dry to the touch. Cold water will cause spotting of the leaves and may damage the roots of these tropical plants, and therefore should be avoided. Water from salt-based softeners should not be used as the salts may damage plants. Certain gesneriads, such as *Episcia*, *Gesneria*, and *Boea*, require soils that are slightly moist at all times. Others, such as *Sinningia*, are especially sensitive to overwatering and poor drainage. A potting soil high in organic matter will work well for most gesneriads. Commercial soil mixes for African violets can also be used. Automatic wick watering devices maintain an even level of soil moisture and are frequently used for gesneriads. Hand watering must be done carefully to avoid overwatering. Injury to the plants results more often from too much water than from too little. It is important to know the needs of the species and adjust watering to satisfy them.

Most of the gesneriads that have scaly rhizomes, such as *Achimenes* and *Kobleria* or tubers, such as *Sinningia* naturally enter a dormant period after blooming. When these plants cease to bloom, the soil should be allowed to dry out by gradually withholding water. The rhizomes or tubers may be stored in their pots or in vermiculite or peat, adding only enough moisture to keep the tubers or rhizomes plump. The dormant period may last as long as four months. When new shoots appear, the tuber or rhizome can be repotted and brought back into the light for

another year's flowering. Since this dormant period may not be necessary for some new hybrids, it is best to verify specific cultural information.

Below are thirteen of the most commonly grown genera of gesneriads with basic information about culture, plant form, and flower type. Particular species are mentioned when they are especially well-suited to indoor cultivation. Plants are fibrous-rooted unless otherwise specified.

## Achimenes

### *Achimenes*

Bloom color: red, orange, purple, blue, yellow, pink, violet, or white  
 Bloom time: spring and summer (dormant September – March)  
 Size: 6" – 24"  
 Habit: upright or spreading  
 Light: blooms can drop in direct sun  
 Moisture: evenly moist except when dormant; if plant is allowed to dry out, it may go dormant prematurely.  
 Humidity: high, mist leaves frequently  
 Temperature: minimum 65 degrees F. (may not bloom above 85 degrees F.)  
 Maintenance: pinch upright forms to keep bushy  
 Notes: scaly rhizomes

## Lipstick Vine

### *Aeschynanthus lobbianus*

Bloom color: red or orange  
 Bloom time: June – September  
 Habit: usually trailing  
 Light: bright light, some direct sun  
 Moisture: evenly moist  
 Humidity: high; mist leaves frequently  
 Temperature: minimum 60 degrees F.  
 Fertilize: monthly at half-strength  
 Maintenance: cut back straggly growth after blooming  
 Notes: excellent when used in hanging baskets

## Rock Violet

### *Boea hygroskopica*

Bloom color: deep blue-purple  
 Bloom time: ever-blooming  
 Size: 4 – 5" h x 6 – 8" w  
 Habit: low rosette  
 Light: bright, no direct sun  
 Moisture: soil should never be allowed to completely dry out  
 Humidity: mist leaves frequently  
 Temperature: minimum 65 degrees F. for bloom  
 Notes: ideal for terrariums

## Goldfish Plant

### *Columnnea*

Bloom color: red or yellow goldfish-like blooms  
 Bloom time: species for approximately one month; hybrids may flower continuously  
 Habit: trailing, spreading and upright forms available  
 Light: bright light, no direct sun  
 Moisture: constant moisture  
 Humidity: mist leaves frequently  
 Temperature: may suffer at temperatures above 85 degrees F.  
 Fertilize: each watering ¼ strength while actively growing  
 Maintenance: requires well-drained soil  
 Notes: a rest period of one month at cool temperatures will trigger bud formation

## Episcia or Flame Violet

### *Episcia*

Bloom color: scarlet, orange, and white, less commonly bluish  
 Bloom time: some are everblooming; others grown for colorful foliage  
 Habit: creeping, trailing  
 Light: bright, no direct sun  
 Moisture: moist at all times in summer; reduce water in winter  
 Humidity: mist leaves frequently  
 Temperature: 60 – 80 degrees F.  
 Fertilize: every two weeks while actively growing

## Gesneria

### *Gesneria cuneifolia* & hybrids

Bloom color: red to yellow  
 Bloom time: everblooming  
 Size: 2 – 3" h  
 Habit: low rosette  
 Light: low  
 Moisture: constant moisture  
 Humidity: occasionally mist leaves  
 Temperature: minimum 65 degrees F.  
 Fertilize: one time per month with ¼ strength fertilizer

## **Bolivian Sunset Gloxinia**

### ***Gloxinia sylvatica***

Bloom color: tomato-red with yellow throat  
Bloom time: can be everblooming  
Size: 12 – 24" h x 12 – 36" w  
Habit: upright to trailing  
Light: bright, no direct sun  
Moisture: moist at all times  
Humidity: mist leaves occasionally  
Temperature: minimum 65 degrees F.  
Fertilize: every two to three weeks while actively growing  
Notes: scaly rhizomes

## **Kohleria**

### ***Kohleria***

Bloom color: red, purple, or pink  
Bloom time: some are everblooming; others need dormancy period  
Size: 1 – 1.5' h  
Habit: upright to sprawling  
Light: higher light grows sturdier, compact plants  
Moisture: moist at all times  
Humidity: high, mist leaves frequently  
Temperature: no greater than 80 degrees F. in summer; tolerates cool  
Fertilize: every two weeks while in bud and bloom  
Notes: scaly rhizomes, patterned green leaves

## **Nematanthus**

### ***Nematanthus***

Bloom color: orange or yellow  
Bloom time: intermittent  
Habit: erect or trailing  
Light: bright, no direct sun  
Moisture: moderate, less in winter  
Humidity: at least 50 percent; mist regularly  
Temperature: sensitive to temperatures below 65 degrees F or above 80 degrees F.  
Fertilize: one time per month while actively growing

## **African Violet**

### ***Saintpaulia***

Bloom color: purple, white, blue, pink, rose, lavender, and bicolor  
Bloom time: can be everblooming  
Size: 3 – 16" h  
Habit: spreading rosette or trailing  
Light: adaptable to low light  
Moisture: soil should dry out between waterings  
Humidity: 50 percent humidity helpful but not vital  
Temperature: minimum 60 degrees F.  
Fertilize: every two weeks while actively growing  
Maintenance: remove spent bloom stems as needed; does not tolerate cold water on leaves or crown  
Notes: single and double flowering, variegated leaf types available

## **Sinningia**

### ***Sinningia***

Bloom color: various  
Bloom time: many hybrids ever-blooming; some species go dormant  
Size: 3" h  
Habit: rosette  
Light: tolerates low light  
Moisture: keep plants moist but not wet using room-temperature water  
Humidity: mist leaves often  
Temperature: should be kept above 65 degrees F.  
Fertilize: one time per month using ½ strength fertilizer  
Maintenance: remove stems that have finished flowering.  
Notes: tuberous

## **Temple Bells**

### ***Smithiana***

Bloom color: reddish-orange outside & yellow with red spots inside  
Bloom time: short bloom season after dormancy period  
Size: 1 – 3' h  
Habit: upright  
Light: bright, no direct sun  
Moisture: one time per week while actively growing, do not water in winter  
Humidity: high, mist leaves frequently  
Temperature: minimum 65 degrees F.  
Fertilize: every other watering  
Maintenance: pinch young plants to keep compact  
Notes: scaly rhizomes

## **Cape Primrose**

### ***Streptocarpus***

Bloom color: blue, pink, mauve, or white  
Bloom time: most of the year with good growing conditions  
Size: 6 – 15" h x 18" w  
Habit: rosettes of long, arching, stemless leaves  
Light: bright, no direct sun  
Moisture: soil should never be allowed to dry out; however, do not overwater; water from bottom  
Humidity: 50 percent or greater  
Temperature: 65 – 80 degrees F.  
Fertilize: twice each month at one-quarter strength  
Maintenance: remove spent flower stem



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